

# Lei Xing

## List of Publications by Year in descending order

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416  
papers

17,793  
citations

13099

68  
h-index

22166

113  
g-index

425  
all docs

425  
docs citations

425  
times ranked

14152  
citing authors

#	ARTICLE	IF	CITATIONS
1	NeRP: Implicit Neural Representation Learning With Prior Embedding for Sparsely Sampled Image Reconstruction. IEEE Transactions on Neural Networks and Learning Systems, 2024, 35, 770-782.	11.3	36
2	Morphological Characteristics of Eroded Plaques with Noncritical Coronary Stenosis: An Optical Coherence Tomography Study. Journal of Atherosclerosis and Thrombosis, 2022, 29, 126-140.	2.0	7
3	Increased Vulnerability and Distinct Layered Phenotype at Culprit and Nonculprit Lesions in STEMI VersusÂNSTEMI. JACC: Cardiovascular Imaging, 2022, 15, 672-681.	5.3	15
4	Dose Prediction for Cervical Cancer Brachytherapy Using 3-D Deep Convolutional Neural Network. IEEE Transactions on Radiation and Plasma Medical Sciences, 2022, 6, 214-221.	3.7	2
5	Human-level comparable control volume mapping with a deep unsupervised-learning model for image-guided radiation therapy. Computers in Biology and Medicine, 2022, 141, 105139.	7.0	1
6	Attention-guided deep learning for gestational age prediction using fetal brain MRI. Scientific Reports, 2022, 12, 1408.	3.3	15
7	Novel-view X-ray projection synthesis through geometry-integrated deep learning. Medical Image Analysis, 2022, 77, 102372.	11.6	3
8	Mechanoporation enables rapid and efficient radiolabeling of stem cells for PET imaging. Scientific Reports, 2022, 12, 2955.	3.3	2
9	Meta-optimization for fully automated radiation therapy treatment planning. Physics in Medicine and Biology, 2022, 67, 055011.	3.0	4
10	Predicting peritoneal recurrence and disease-free survival from CT images in gastric cancer with multitask deep learning: a retrospective study. The Lancet Digital Health, 2022, 4, e340-e350.	12.3	45
11	Implicit neural representation for radiation therapy dose distribution. Physics in Medicine and Biology, 2022, 67, 125014.	3.0	7
12	Beam commissioning of the first clinical biologyâ€guided radiotherapy system. Journal of Applied Clinical Medical Physics, 2022, 23, e13607.	1.9	8
13	IMRT and SBRT Treatment Planning Study for the First Clinical Biology-Guided Radiotherapy System. Technology in Cancer Research and Treatment, 2022, 21, 153303382211002.	1.9	7
14	Treatment planning system commissioning of the first clinical biologyâ€guided radiotherapy machine. Journal of Applied Clinical Medical Physics, 2022, 23, .	1.9	9
15	Operator splitting for adaptive radiation therapy with nonlinear health dynamics. Optimization Methods and Software, 2022, 37, 2300-2323.	2.4	1
16	Relationship of Microchannels and Plaque Erosion in Patients with ST-Segment Elevation Myocardial Infarction: An Optical Coherence Tomography Study. Cardiology Discovery, 2022, 2, 83-88.	0.5	0
17	A geometry-informed deep learning framework for ultra-sparse 3D tomographic image reconstruction. Computers in Biology and Medicine, 2022, 148, 105710.	7.0	13
18	Shifting machine learning for healthcare from development to deployment and from models to data. Nature Biomedical Engineering, 2022, 6, 1330-1345.	22.5	69

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19	A data-driven dimensionality-reduction algorithm for the exploration of patterns in biomedical data. Nature Biomedical Engineering, 2021, 5, 624-635.	22.5	20
20	Transformation-Consistent Self-Ensembling Model for Semisupervised Medical Image Segmentation. IEEE Transactions on Neural Networks and Learning Systems, 2021, 32, 523-534.	11.3	240
21	Deep Sinogram Completion With Image Prior for Metal Artifact Reduction in CT Images. IEEE Transactions on Medical Imaging, 2021, 40, 228-238.	8.9	67
22	Pancoronary Plaque Characteristics in STEMI Caused by Culprit Plaque Erosion Versus Rupture. JACC: Cardiovascular Imaging, 2021, 14, 1235-1245.	5.3	29
23	Systemic and local factors associated with reduced thrombolysis in myocardial infarction flow in ST-segment elevation myocardial infarction patients with plaque erosion detected by intravascular optical coherence tomography. International Journal of Cardiovascular Imaging, 2021, 37, 399-409.	1.5	5
24	Outlook of the future landscape of artificial intelligence in medicine and new challenges. , 2021, , 503-526.		1
25	Artificial intelligence should be part of medical physics graduate program curriculum. Medical Physics, 2021, 48, 1457-1460.	3.0	6
26	Pulmonary Ventilation Maps Generated with Free-breathing Proton MRI and a Deep Convolutional Neural Network. Radiology, 2021, 298, 427-438.	7.3	16
27	Closing the Gap Between Deep Neural Network Modeling and Biomedical Decision-Making Metrics in Segmentation via Adaptive Loss Functions. IEEE Transactions on Medical Imaging, 2021, 40, 585-593.	8.9	16
28	Development and validation of a model to predict survival in colorectal cancer using a gradient-boosted machine. Gut, 2021, 70, 884-889.	12.1	30
29	Deep Neural Network With Consistency Regularization of Multi-Output Channels for Improved Tumor Detection and Delineation. IEEE Transactions on Medical Imaging, 2021, 40, 3369-3378.	8.9	19
30	Deep learning-augmented radiotherapy visualization with a cylindrical radioluminescence system. Physics in Medicine and Biology, 2021, 66, 045014.	3.0	2
31	Automated contour propagation of the prostate from pCT to CBCT images via deep unsupervised learning. Medical Physics, 2021, 48, 1764-1770.	3.0	20
32	Prior-image-based CT reconstruction using attenuation-mismatched priors. Physics in Medicine and Biology, 2021, 66, 064007.	3.0	2
33	Calibrated uncertainty estimation for interpretable proton computed tomography image correction using Bayesian deep learning. Physics in Medicine and Biology, 2021, 66, 065029.	3.0	3
34	Modularized data-driven reconstruction framework for nonideal focal spot effect elimination in computed tomography. Medical Physics, 2021, 48, 2245-2257.	3.0	4
35	A robotically assisted 3D printed quality assurance lung phantom for Calypso. Physics in Medicine and Biology, 2021, 66, 074005.	3.0	3
36	Multi-Domain Image Completion for Random Missing Input Data. IEEE Transactions on Medical Imaging, 2021, 40, 1113-1122.	8.9	43

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37	MR to ultrasound image registration with segmentation-based learning for HDR prostate brachytherapy. Medical Physics, 2021, 48, 3074-3083.	3.0	13
38	Estimating dual-energy CT imaging from single-energy CT data with material decomposition convolutional neural network. Medical Image Analysis, 2021, 70, 102001.	11.6	34
39	Independent verification of brachytherapy treatment plan by using deep learning inference modeling. Physics in Medicine and Biology, 2021, 66, 125014.	3.0	7
40	Development and Validation of an Interpretable Artificial Intelligence Model to Predict 10-Year Prostate Cancer Mortality. Cancers, 2021, 13, 3064.	3.7	8
41	Detection of Carotid Artery Stenosis with Intraplaque Hemorrhage and Neovascularization Using a Scanning Interferometer. Nano Letters, 2021, 21, 5714-5721.	9.1	0
42	Multicellular Spheroids as In Vitro Models of Oxygen Depletion During FLASH Irradiation. International Journal of Radiation Oncology Biology Physics, 2021, 110, 833-844.	0.8	26
43	Noise2Context: Context-assisted learning 3D thin-layer for low-dose CT. Medical Physics, 2021, 48, 5794-5803.	3.0	12
44	Metal artifact reduction in 2D CT images with self-supervised cross-domain learning. Physics in Medicine and Biology, 2021, 66, 175003.	3.0	16
45	Rotation-Oriented Collaborative Self-Supervised Learning for Retinal Disease Diagnosis. IEEE Transactions on Medical Imaging, 2021, 40, 2284-2294.	8.9	41
46	Deep learning-augmented radioluminescence imaging for radiotherapy dose verification. Medical Physics, 2021, 48, 6820-6831.	3.0	4
47	Fully automated noncoplanar radiation therapy treatment planning. Medical Physics, 2021, 48, 7439-7449.	3.0	5
48	Deep learning-enabled EPID-based 3D dosimetry for dose verification of step-and-shoot radiotherapy. Medical Physics, 2021, 48, 6810-6819.	3.0	4
49	Pareto Optimal Projection Search (POPS): Automated Radiation Therapy Treatment Planning by Direct Search of the Pareto Surface. IEEE Transactions on Biomedical Engineering, 2021, 68, 2907-2917.	4.2	4
50	Geometry and statistics-preserving manifold embedding for nonlinear dimensionality reduction. Pattern Recognition Letters, 2021, 151, 155-162.	4.2	8
51	TransCT: Dual-Path Transformer for Low Dose Computed Tomography. Lecture Notes in Computer Science, 2021, , 55-64.	1.3	35
52	Small-field measurement and Monte Carlo model validation of a novel image-guided radiotherapy system. Medical Physics, 2021, 48, 7450-7460.	3.0	7
53	Relationship between non-culprit lesion plaque characteristics changes and in-stent neoatherosclerosis formation: 1-year follow-up optical coherence tomography study. Reviews in Cardiovascular Medicine, 2021, 22, 1693.	1.4	0
54	Automated hepatobiliary toxicity prediction after liver stereotactic body radiation therapy with deep learning-based portal vein segmentation. Neurocomputing, 2020, 392, 181-188.	5.9	6

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55	Incorporating prior knowledge via volumetric deep residual network to optimize the reconstruction of sparsely sampled MRI. Magnetic Resonance Imaging, 2020, 66, 93-103.	1.8	29
56	Design and Preliminary Experience of a Tele-Radiotherapy System for a Medical Alliance in China. Telemedicine Journal and E-Health, 2020, 26, 235-243.	2.8	6
57	High-Frequency Irreversible Electroporation Using 5,000-V Waveforms to Create Reproducible 2- and 4-cm Ablation Zones—A Laboratory Investigation Using Mechanically Perfused Liver. Journal of Vascular and Interventional Radiology, 2020, 31, 162-168.e7.	0.5	15
58	Modified U-Net (mU-Net) With Incorporation of Object-Dependent High Level Features for Improved Liver and Liver-Tumor Segmentation in CT Images. IEEE Transactions on Medical Imaging, 2020, 39, 1316-1325.	8.9	252
59	Densely Connected Neural Network With Unbalanced Discriminant and Category Sensitive Constraints for Polyp Recognition. IEEE Transactions on Automation Science and Engineering, 2020, 17, 574-583.	5.2	26
60	Modified fast adaptive scatter kernel superposition (mfASKS) correction and its dosimetric impact on CBCT-based proton therapy dose calculation. Medical Physics, 2020, 47, 190-200.	3.0	10
61	Deep DoseNet: a deep neural network for accurate dosimetric transformation between different spatial resolutions and/or different dose calculation algorithms for precision radiation therapy. Physics in Medicine and Biology, 2020, 65, 035010.	3.0	30
62	Wireless Capsule Endoscopy: A New Tool for Cancer Screening in the Colon With Deep-Learning-Based Polyp Recognition. Proceedings of the IEEE, 2020, 108, 178-197.	21.3	53
63	Frequency, Predictors, Distribution, and Morphological Characteristics of Layered Culprit and Nonculprit Plaques of Patients With Acute Myocardial Infarction. Circulation: Cardiovascular Interventions, 2020, 13, e009125.	3.9	20
64	Automatic intraprostatic lesion segmentation in multiparametric magnetic resonance images with proposed multiple branch UNet. Medical Physics, 2020, 47, 6421-6429.	3.0	25
65	Beam data modeling of linear accelerators (linacs) through machine learning and its potential applications in fast and robust linac commissioning and quality assurance. Radiotherapy and Oncology, 2020, 153, 122-129.	0.6	14
66	Accelerating quantitative MR imaging with the incorporation of B1 compensation using deep learning. Magnetic Resonance Imaging, 2020, 72, 78-86.	1.8	15
67	Self-Supervised Feature Learning via Exploiting Multi-Modal Data for Retinal Disease Diagnosis. IEEE Transactions on Medical Imaging, 2020, 39, 4023-4033.	8.9	66
68	Technical Note: Evaluation of audiovisual biofeedback smartphone application for respiratory monitoring in radiation oncology. Medical Physics, 2020, 47, 5496-5504.	3.0	2
69	Deriving new soft tissue contrasts from conventional MR images using deep learning. Magnetic Resonance Imaging, 2020, 74, 121-127.	1.8	1
70	Deep Learning Prediction of Cancer Prevalence from Satellite Imagery. Cancers, 2020, 12, 3844.	3.7	4
71	Automatic Polyp Recognition in Colonoscopy Images Using Deep Learning and Two-Stage Pyramidal Feature Prediction. IEEE Transactions on Automation Science and Engineering, 2020, , 1-15.	5.2	34
72	Machine learning techniques for biomedical image segmentation: An overview of technical aspects and introduction to state-of-art applications. Medical Physics, 2020, 47, e148-e167.	3.0	151

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73	Electro-thermal therapy: Microsecond duration pulsed electric field tissue ablation with dynamic temperature control algorithms. Computers in Biology and Medicine, 2020, 121, 103807.	7.0	8
74	Temperature Dependence of High Frequency Irreversible Electroporation Evaluated in a 3D Tumor Model. Annals of Biomedical Engineering, 2020, 48, 2233-2246.	2.5	21
75	Deep learning for identification of critical regions associated with toxicities after liver stereotactic body radiation therapy. Medical Physics, 2020, 47, 3721-3731.	3.0	22
76	Deep Learning-Based Spectral Unmixing for Optoacoustic Imaging of Tissue Oxygen Saturation. IEEE Transactions on Medical Imaging, 2020, 39, 3643-3654.	8.9	39
77	Relationship between elevated plasma ceramides and plaque rupture in patients with ST-segment elevation myocardial infarction. Atherosclerosis, 2020, 302, 8-14.	0.8	13
78	Deep learning applications in automatic needle segmentation in ultrasound-guided prostate brachytherapy. Medical Physics, 2020, 47, 3797-3805.	3.0	11
79	Hybrid adversarial-discriminative network for leukocyte classification in leukemia. Medical Physics, 2020, 47, 3732-3744.	3.0	23
80	Verification of the machine delivery parameters of a treatment plan via deep learning. Physics in Medicine and Biology, 2020, 65, 195007.	3.0	13
81	A deep learning framework for prostate localization in cone beam CT-guided radiotherapy. Medical Physics, 2020, 47, 4233-4240.	3.0	21
82	Fast spot-scanning proton dose calculation method with uncertainty quantification using a three-dimensional convolutional neural network. Physics in Medicine and Biology, 2020, 65, 215007.	3.0	8
83	Restarted primal-dual Newton conjugate gradient method for enhanced spatial resolution of reconstructed cone-beam x-ray luminescence computed tomography images. Physics in Medicine and Biology, 2020, 65, 135008.	3.0	10
84	Screening for chronic obstructive pulmonary disease with artificial intelligence. The Lancet Digital Health, 2020, 2, e216-e217.	12.3	11
85	Difficulty-Aware Meta-learning for Rare Disease Diagnosis. Lecture Notes in Computer Science, 2020, , 357-366.	1.3	28
86	Automated multi-parameter high-dose-rate brachytherapy quality assurance via radioluminescence imaging. Physics in Medicine and Biology, 2020, 65, 225005.	3.0	7
87	Data-driven dose calculation algorithm based on deep U-Net. Physics in Medicine and Biology, 2020, 65, 245035.	3.0	22
88	Deep learning-enhanced LED-based photoacoustic imaging. , 2020, , .		7
89	Deciphering tissue relaxation parameters from a single MR image using deep learning. , 2020, , .		3
90	Superpixel Region Merging Based on Deep Network for Medical Image Segmentation. ACM Transactions on Intelligent Systems and Technology, 2020, 11, 1-22.	4.5	13

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91	High-speed X-ray-induced luminescence computed tomography. Journal of Biophotonics, 2020, 13, e202000066.	2.3	4
92	Second window near-infrared dosimeter (NIR2D) system for radiation dosimetry. Physics in Medicine and Biology, 2020, 65, 175013.	3.0	0
93	Food based contrast agents for photoacoustic imaging. , 2020, , .		0
94	Obtaining dual-energy computed tomography (CT) information from a single-energy CT image for quantitative imaging analysis of living subjects by using deep learning. Pacific Symposium on Biocomputing Pacific Symposium on Biocomputing, 2020, 25, 139-148.	0.7	6
95	Deep Generative Adversarial Neural Networks for Compressive Sensing MRI. IEEE Transactions on Medical Imaging, 2019, 38, 167-179.	8.9	373
96	A radiomics approach based on support vector machine using MR images for preoperative lymph node status evaluation in intrahepatic cholangiocarcinoma. Theranostics, 2019, 9, 5374-5385.	10.0	108
97	Real-Time Radiation Treatment Planning with Optimality Guarantees via Cluster and Bound Methods. INFORMS Journal on Computing, 2019, 31, 544-558.	1.7	5
98	Incorporating imaging information from deep neural network layers into image guided radiation therapy (IGRT). Radiotherapy and Oncology, 2019, 140, 167-174.	0.6	28
99	Prostate Segmentation with Encoder-Decoder Densely Connected Convolutional Network (Ed-Densenet). , 2019, , .		18
100	Markerless Pancreatic Tumor Target Localization Enabled By Deep Learning. International Journal of Radiation Oncology Biology Physics, 2019, 105, 432-439.	0.8	49
101	Range and dose verification in proton therapy using proton-induced positron emitters and recurrent neural networks (RNNs). Physics in Medicine and Biology, 2019, 64, 175009.	3.0	19
102	Optimizing efficiency and safety in external beam radiotherapy using automated plan check (APC) tool and six sigma methodology. Journal of Applied Clinical Medical Physics, 2019, 20, 56-64.	1.9	16
103	Fully automatic segmentation of type B aortic dissection from CTA images enabled by deep learning. European Journal of Radiology, 2019, 121, 108713.	2.6	61
104	Reduced acquisition time for L-shell x-ray fluorescence computed tomography using polycapillary x-ray optics. Medical Physics, 2019, 46, 5696-5702.	3.0	7
105	Technical Note: Machine learning approaches for range and dose verification in proton-induced positron emitters. Medical Physics, 2019, 46, 5748-5757.	3.0	14
106	Culprit lesion morphology in young patients with ST-segment elevated myocardial infarction: A clinical, angiographic and optical coherence tomography study. Atherosclerosis, 2019, 289, 94-100.	0.8	21
107	Augmented Bladder Tumor Detection Using Deep Learning. European Urology, 2019, 76, 714-718.	1.9	117
108	Tensor framelet based iterative image reconstruction algorithm for low-dose multislice helical CT. PLoS ONE, 2019, 14, e0210410.	2.5	2



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109	Controlled Nano-Bio Interface of Functional Nanoprobes for in Vivo Monitoring Enzyme Activity in Tumors. ACS Nano, 2019, 13, 1153-1167.	14.6	16
110	Dose distribution prediction in isodose feature-preserving voxelization domain using deep convolutional neural network. Medical Physics, 2019, 46, 2978-2987.	3.0	27
111	Task Group 174 Report: Utilization of [ 18 F]Fluorodeoxyglucose Positron Emission Tomography ([ 18 F] FDG) PET/CT for the Assessment of Response to Radiation Therapy. Medical Physics, 2019, 46, 2978-2987.	3.0	15
112	Potential of Gd-EOB-DTPA as an imaging biomarker for liver injury estimation after radiation therapy. Hepatobiliary and Pancreatic Diseases International, 2019, 18, 354-359.	1.3	8
113	Simulation studies of time reversal-based protoacoustic reconstruction for range and dose verification in proton therapy. Medical Physics, 2019, 46, 3649-3662.	3.0	21
114	Projection-domain scatter correction for cone beam computed tomography using a residual convolutional neural network. Medical Physics, 2019, 46, 3142-3155.	3.0	55
115	Incorporating dosimetric features into the prediction of 3D VMAT dose distributions using deep convolutional neural network. Physics in Medicine and Biology, 2019, 64, 125017.	3.0	35
116	Attention-aware fully convolutional neural network with convolutional long short-term memory network for ultrasound-based motion tracking. Medical Physics, 2019, 46, 2275-2285.	3.0	22
117	Neural Networks for Deep Radiotherapy Dose Analysis and Prediction of Liver SBRT Outcomes. IEEE Journal of Biomedical and Health Informatics, 2019, 23, 1821-1833.	6.3	25
118	A novel range-verification method using ionoacoustic wave generated from spherical gold markers for particle-beam therapy: a simulation study. Scientific Reports, 2019, 9, 4011.	3.3	9
119	Self-attention convolutional neural network for improved MR image reconstruction. Information Sciences, 2019, 490, 317-328.	6.9	65
120	In Vivo Translation of the CIRPI System: Revealing Molecular Pathology of Rabbit Aortic Atherosclerotic Plaques. Journal of Nuclear Medicine, 2019, 60, 1308-1316.	5.0	2
121	Obtaining dual-energy computed tomography (CT) information from a single-energy CT image for quantitative imaging analysis of living subjects by using deep learning. , 2019, , .		10
122	Upconversion Luminescence Imaging of Tumors with EGFR-Affibody Conjugated Nanophosphors. MRS Advances, 2019, 4, 2461-2470.	0.9	2
123	Factor 10 Expedience of Monthly Linac Quality Assurance via an Ion Chamber Array and Automation Scripts. Technology in Cancer Research and Treatment, 2019, 18, 153303381987689.	1.9	5
124	Patient-specific reconstruction of volumetric computed tomography images from a single projection view via deep learning. Nature Biomedical Engineering, 2019, 3, 880-888.	22.5	163
125	A convex optimization approach to radiation treatment planning with dose constraints. Optimization and Engineering, 2019, 20, 277-300.	2.4	10
126	Prostate cancer classification with multiparametric MRI transfer learning model. Medical Physics, 2019, 46, 756-765.	3.0	98



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127	Dosimetric features-driven machine learning model for DVH prediction in VMAT treatment planning. Medical Physics, 2019, 46, 857-867.	3.0	34
128	Harnessing the power of deep learning for volumetric CT imaging with single or limited number of projections. , 2019, , .		5
129	A deep learning approach for dual-energy CT imaging using a single-energy CT data. , 2019, , .		11
130	X-ray-induced shortwave infrared luminescence computed tomography. Optics Letters, 2019, 44, 4769.	3.3	9
131	High spatial resolution x-ray luminescence computed tomography and x-ray fluorescence computed tomography. , 2019, , .		1
132	Automatic marker-free target positioning and tracking for image-guided radiotherapy and interventions. , 2019, , .		0
133	Artificial intelligence will soon change the landscape of medical physics research and practice. Medical Physics, 2018, 45, 1791-1793.	3.0	57
134	Coded-Aperture Compressed Sensing X-Ray Luminescence Tomography. IEEE Transactions on Biomedical Engineering, 2018, 65, 1892-1895.	4.2	18
135	A unified material decomposition framework for quantitative dual- and triple-energy CT imaging. Medical Physics, 2018, 45, 2964-2977.	3.0	19
136	Synergistically Enhancing the Therapeutic Effect of Radiation Therapy with Radiation Activatable and Reactive Oxygen Species-Releasing Nanostructures. ACS Nano, 2018, 12, 4946-4958.	14.6	101
137	Reduction of Muscle Contractions during Irreversible Electroporation Therapy Using High-Frequency Bursts of Alternating Polarity Pulses: A Laboratory Investigation in an Ex Vivo Swine Model. Journal of Vascular and Interventional Radiology, 2018, 29, 893-898.e4.	0.5	46
138	Superpixel-based and boundary-sensitive convolutional neural network for automated liver segmentation. Physics in Medicine and Biology, 2018, 63, 095017.	3.0	73
139	Nonculprit Plaque Characteristics in Patients With Acute Coronary Syndrome Caused by Plaque Erosion vs Plaque Rupture. JAMA Cardiology, 2018, 3, 207.	6.1	63
140	Selection of external beam radiotherapy approaches for precise and accurate cancer treatment. Journal of Radiation Research, 2018, 59, i2-i10.	1.6	28
141	Radiomics and radiogenomics for precision radiotherapy. Journal of Radiation Research, 2018, 59, i25-i31.	1.6	74
142	Strategies for prediction and mitigation of radiation-induced liver toxicity. Journal of Radiation Research, 2018, 59, i40-i49.	1.6	33
143	Generalized Adaptive Gaussian Markov Random Field for X-Ray Luminescence Computed Tomography. IEEE Transactions on Biomedical Engineering, 2018, 65, 2130-2133.	4.2	19
144	Optimization of a single insertion electrode array for the creation of clinically relevant ablations using high-frequency irreversible electroporation. Computers in Biology and Medicine, 2018, 95, 107-117.	7.0	23

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145	A computation study on an integrated alternating direction method of multipliers for large scale optimization. Optimization Letters, 2018, 12, 3-15.	1.6	3
146	Cumulative dose of radiation therapy of hepatocellular carcinoma patients and its deterministic relation to radiation-induced liver disease. Medical Dosimetry, 2018, 43, 258-266.	0.9	5
147	Treatment of Cancer In Vitro Using Radiation and High-Frequency Bursts of Submicrosecond Electrical Pulses. IEEE Transactions on Biomedical Engineering, 2018, 65, 928-935.	4.2	17
148	Differences in coronary plaque morphology between East Asian and Western White patients. Coronary Artery Disease, 2018, 29, 597-602.	0.7	5
149	Line-Enhanced Deformable Registration of Pulmonary Computed Tomography Images Before and After Radiation Therapy With Radiation-Induced Fibrosis. Technology in Cancer Research and Treatment, 2018, 17, 153303461774941.	1.9	2
150	Rare-Earth-Doped Nanoparticles for Short-Wave Infrared Fluorescence Bioimaging and Molecular Targeting of $\text{I}^{\pm\text{V}}\text{I}^2\text{-Expressing Tumors}$ . Molecular Imaging, 2018, 17, 153601211879913.	1.4	10
151	Editorial: Machine Learning With Radiation Oncology Big Data. Frontiers in Oncology, 2018, 8, 416.	2.8	5
152	RIIS-DenseNet: Rotation-Invariant and Image Similarity Constrained Densely Connected Convolutional Network for Polyp Detection. Lecture Notes in Computer Science, 2018, , 620-628.	1.3	12
153	Isodose feature-preserving voxelization (IFPV) for radiation therapy treatment planning. Medical Physics, 2018, 45, 3321-3329.	3.0	4
154	Polarized x-ray excitation for scatter reduction in x-ray fluorescence computed tomography. Medical Physics, 2018, 45, 3741-3748.	3.0	13
155	Segmentation of parotid glands from registered CT and MR images. Physica Medica, 2018, 52, 33-41.	0.7	33
156	Monte Carlo tree search -based non-coplanar trajectory design for station parameter optimized radiation therapy (SPORT). Physics in Medicine and Biology, 2018, 63, 135014.	3.0	13
157	Feasibility of optimizing intensity-modulated radiation therapy plans based on measured mucosal dose adjacent to dental fillings and toxicity outcomes. Journal of Applied Clinical Medical Physics, 2018, 19, 444-452.	1.9	0
158	Burst and continuous high frequency irreversible electroporation protocols evaluated in a 3D tumor model. Physics in Medicine and Biology, 2018, 63, 135022.	3.0	26
159	Learning deconvolutional deep neural network for high resolution medical image reconstruction. Information Sciences, 2018, 468, 142-154.	6.9	58
160	Development of deep neural network for individualized hepatobiliary toxicity prediction after liver $\text{SBRT}$ . Medical Physics, 2018, 45, 4763-4774.	3.0	103
161	A Dual-Modality Hybrid Imaging System Harnesses Radioluminescence and Sound to Reveal Molecular Pathology of Atherosclerotic Plaques. Scientific Reports, 2018, 8, 8992.	3.3	8
162	Imaging cellular pharmacokinetics of $^{18}\text{F}$ -FDG and $^6\text{-NBDG}$ uptake by inflammatory and stem cells. PLoS ONE, 2018, 13, e0192662.	2.5	1

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163	Effective anti-thrombotic therapy without stenting: intravascular optical coherence tomography-based management in plaque erosion (the EROSION study). European Heart Journal, 2017, 38, ehw381.	2.2	214
164	Robust Estimation of Electron Density From Anatomic Magnetic Resonance Imaging of the Brain Using a Unifying Multi-Atlas Approach. International Journal of Radiation Oncology Biology Physics, 2017, 97, 849-857.	0.8	11
165	Binary moving-blocker-based scatter correction in cone-beam computed tomography with width-truncated projections: proof of concept. Physics in Medicine and Biology, 2017, 62, 2176-2193.	3.0	12
166	Fully automated quantitative cephalometry using convolutional neural networks. Journal of Medical Imaging, 2017, 4, 014501.	1.5	168
167	Segmentation of Pathological Structures by Landmark-Assisted Deformable Models. IEEE Transactions on Medical Imaging, 2017, 36, 1457-1469.	8.9	40
168	Clinical Significance of Lipid-Rich Plaque Detected by Optical Coherence Tomography. Journal of the American College of Cardiology, 2017, 69, 2502-2513.	2.8	142
169	Using a handheld stereo depth camera to overcome limited field-of-view in simulation imaging for radiation therapy treatment planning. Medical Physics, 2017, 44, 1857-1864.	3.0	9
170	Development of an autonomous treatment planning strategy for radiation therapy with effective use of population-based prior data. Medical Physics, 2017, 44, 389-396.	3.0	30
171	Lipid-lowering therapy stabilizes the complexity of non-culprit plaques in human coronary artery: a quantitative assessment using OCT bright spot algorithm. International Journal of Cardiovascular Imaging, 2017, 33, 453-461.	1.5	7
172	Segmentation of organs-at-risk in head and neck CT images using convolutional neural networks. Medical Physics, 2017, 44, 547-557.	3.0	398
173	Augmenting atlas-based liver segmentation for radiotherapy treatment planning by incorporating image features proximal to the atlas contours. Physics in Medicine and Biology, 2017, 62, 272-288.	3.0	20
174	Combining deep learning with anatomical analysis for segmentation of the portal vein for liver SBRT planning. Physics in Medicine and Biology, 2017, 62, 8943-8958.	3.0	65
175	Differences in coronary plaque characteristics between patients with and those without peripheral arterial disease. Coronary Artery Disease, 2017, 28, 658-663.	0.7	4
176	Dynamic neointimal pattern after drug-eluting stent implantation defined by optical coherence tomography. Coronary Artery Disease, 2017, 28, 557-563.	0.7	2
177	A new sparse optimization scheme for simultaneous beam angle and fluence map optimization in radiotherapy planning. Physics in Medicine and Biology, 2017, 62, 6428-6445.	3.0	10
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